

The Friedrich-Alexander-University Erlangen-Nuremberg (FAU) is one of the largest and most research-intensive universities in Germany, with around 40000 students and 4000 employees in the scientific sector. At the Chair of Chemical Reaction Engineering novel selective catalytic systems for technically relevant chemical reactions and components for novel materials are developed.

The Chair of Chemical Reaction Engineering at the Friedrich-Alexander-University Erlangen-Nuremberg has a vacancy for a

DOCTORAL CANDIDATE (M/F/D)

EGR. 13 TV-L

on the basis of §2 Wissenschaftszeitvertragsgesetz for an initial period of three years. The weekly working time corresponds to 75% of the regular weekly working time.

Tasks

The tasks of a research assistant (M/F/D) include activities in research and teaching with the possibility to prepare a doctoral thesis.

Research area

Energy production from renewable resources leads to decentralized and dynamic supply of electrical energy. This requires technologies to effectively store and transport excess energy. Liquid organic hydrogen carriers (LOHC) represent a promising option for the safe, well-scalable and cost-effective storage of renewable hydrogen. In cooperation with our project partner Umicore AG & Co we pursue the target to develop catalytically activated heat transfer plates for power-dense hydrogen release from LOHC in mobile applications. The focus of the research project is on the conceptual design and construction of a robust and flexible catalytic plate reactor, as well as on the development of highly active and durable catalyst layers.

Necessary qualifications

Above-average degree in chemical engineering, process engineering or a comparable course of study. You should have the skills to work independently, to critically evaluate your own results and to collaborate in a broader research team. A good command of English is required. Knowledge in chemical reaction engineering, analytics and working experience in chemical laboratories is desirable.

Application

For further information, please contact Mr. Patrick Schühle and send your application documents (cover letter, curriculum vitae in tabular form, university degree) to Patrick.Schuehle@fau.de (Tel. 09131/85-20335).